Not on file: *Engineer Highlight*

NASA JSC Photo S99-15922 by Robert Markowitz

Name: Heather M. Mitchell

Title: Technical Manager, EVA Project Office

Time at NASA: 19 years, including four years as a co-op student

Education: University of Michigan, B.S., Aerospace Engineering

Favorite book or movie: Too many to pick a favorite.

Favorite music: Jazz, Reggae, R&B.

When away from JSC: I enjoy travel, especially to tropical islands. I'm trying to visit at least one beach for every letter in the alphabet. I'm up to the letter J which is the James Bond Beach on the North coast of Jamaica. I've also seen L, M and O. I haven't found a beach that started with the letters Y or Z.

What you like about NASA … and your job at JSC: I really like the international aspect of my job. I get to meet people from all over the world, and have even traveled to Italy and Germany. I get a taste of a lot of different cultures while supporting the International Space Station Program.

Background: An unforgettable plane ride transporting her family from the warmth of Jamaica to chilly Michigan was forever imprinted on 8-year-old Heather Mitchell's mind. That first plane ride was the seed that led her to become an aerospace engineer.

"It was the most fascinating thing I had ever seen," says Mitchell of the experience. "From that day, I knew I wanted to work on airplanes."

Now Mitchell is a far cry from the sandy beaches of her native land. With days filled as a space shuttle flight lead for the EVA Project Office, she coordinates many aspects for planned Extravehicular Activities, including verifiying that all EVA requirements are met and coordinating what tools, stowage, equipment, training and mockups will be needed to meet them.

"The job comes with a lot of challenges," said Mitchell. "But I like it. There is simply so much that has to be done that the job comes with a lot of flexibility. You have to be a self-starter – there's no time for handholding. You have to know how to integrate all the components."

Prior to working in the EVA Project Office, she worked as a Mission Operations Directorate assembly operations lead and as a guidance, navigation and control flight controller, a position she says really helped her prepare for her current tasks. "That Mission Control Center position provided me with a lot of hands-on knowledge of the systems. You had to know how those pieces work in the event of a failure."

According to Milt Heflin, a flight director at the time, that is exactly what it takes to work the MCC. "To be a flight controller, in any position, takes a strong attitude of if you don't have the answer, you'll get it," said Heflin, deputy chief, MOD Flight Director Office. "It takes someone who not only understands the system, but is cognizant of the surroundings as well. Heather works very hard at understanding her role and is consistently good at pursuing the truth and making things happen."

Growing up in small Niles, Michigan, only miles from the University of Notre Dame, Mitchell says she didn't always have exposure to strong mentors.

"It was tough to find role models, much less African American and women role models," explained Mitchell. "And we didn't have all the opportunities that people located close to JSC have."

Mitchell's long-term plan is to go back to Jamaica one day and build a school. But for now, she's focusing on ensuring that she is projecting a healthy, solid image for the next generation of could-be engineers, including her 12-year-old son, Javian. She does that by committing time each year to Engineers Week and other educational outreach activities.

"I am where I am today because other people carved a path when there were no African Americans or women in engineering and other professions," said Mitchell, remembering the days when she says a woman engineer was like an exhibit at the zoo. "Astronaut Ron McNair and Congresswoman Barbara Jordan were great role models. Finding a path for the next group – that is what I try to keep in mind." ■

Correction

The article regarding STS-99 in the December 17 issue incorrectly listed the crewmembers. The STS-99 crew includes Commander Kevin Kregel; Pilot Dom Gorie; and Mission Specialists Janet Kavandi, Ph.D.; Janice Voss, Ph.D.; Mamoru Mohri, Ph.D. (NASDA); and Gerhard P. J. Thiele (ESA).

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STEP is mandatory for civil servants, but also highly recommended for contractor personnel. For more information on STEP, contact your training coordinator or Stacey Menard at x45660. ■

Faces in the crowd

What do you think would be an exciting next step in the space program?

NASA JSC Photo 99e12624

Price Lewis
USA, Software Engineer

Planetary exploration and the interface between man and machines. There is still a great deal we just don't know yet about our local solar system. Man and machine interfaces developed for planetary exploration could be of great benefit here on Earth.

NASA JSC Photo 99e12625

Keith Medina
USA, Flight Design Manager

The most exciting next step would be a manned mission to Mars. I've been working in the human space flight program for 16 years and to get people to Mars presents a very big challenge. There's a lot still to learn about Mars' water and geology from a scientific aspect. We could find its history is similar to ours.

NASA JSC Photo 99e12628

Matt McCurdy
NASA Co-op

A self-sustaining base on the moon. I believe the moon's resources and close proximity to Earth make a lunar base the next logical step in human space exploration.

NASA JSC Photo 99e12631

Dennis Miller
Lockheed Martin, Mechanical Engineer

Asteroid exploration for mineral and natural resources. We could pursue mining the asteroids, which has always been really popular in science fiction.

JSC Photos by James Blair